

- (b) with the use of + and - symbols delineating the left and right octaves, respectively, of the three octave layout
  - (c) with music sheets prepared either as a prepared text sheets, numbers printed directly on the score giving special attention to the syllabication of text or in a traditional, hymn-like format (2 clefs/four harmonic parts) score,
  - (d) with presentation made without respect to fingering considerations of any kind,
- said process methodology aids in the rapid reproduction of melodies/choral parts.

### **REMARKS**

The OA rejected Claim 1 as failing to define the invention as required, (35 USC §112) “narrative in form and replete with indefinite and functional or operational language.” Claim 1 has been rewritten in a simple sentence that more logically presents and more clearly states the objectives of this process methodology, as follows:

“A choral keyboarding process/methodology that utilizes a three-octave layout in a negative-regular-positive relationship presented with logically repetitive numerical indicia, said octaves having been chosen as they exemplify the range of most melodies/choral parts.”

#### **Clear and understandable simple sentence**

This allows the claim to be clearer and more understandable and the following dependent claims are sequentially presented as they naturally occur in this process methodology.

The simple sentence, listed above, and the dependent claims, restated below with additional remarks, show the logical sequence of their use in this process/methodology and how the

manipulation of the elements of the process, i.e., knowledge of the 1-8 (c to c) sequence, + and – symbols, specially prepared music sheets/scores, and no fingering considerations, allows the achievement of the desired results which are to instantly reproduce melodies/choral parts, with minimal extraneous appurtenances and limited technical knowledge of music.

Again, all dependent claims are restated below with remarks as to their importance in the process.

“Whereby,

- (a) with knowledge of the number sequence 1-8 (c-c), repeated three times, with each 8 perceived as a newly occurring 1,”

#### **Observations made of student success with three octave format**

A student/lay musician with no musical knowledge has been observed, with minimal introduction, to quickly reproduce familiar melodies/choral parts, melodically and rhythmically correct, utilizing this three octave format. Through this process, students/lay musicians can realize/reproduce music, which may appear in any of 15 major keys, i.e., with no conventional knowledge of music, rhythmically, melodically, or harmonically.

“Whereby

- (b) with the use of + and – symbols delineating the left and right octaves, respectively, of the three octave layout,”

#### **Conventional musical knowledge unnecessary**

This method provides parameters for octave boundaries, allowing the use of numerical indicia, including the + and – symbols, providing for appropriate range in the reproduction of

melodically and rhythmically correct melodies, with no conventional musical knowledge on the part of the participant.

“Whereby,

- (c) with music sheets prepared either as a prepared text sheets, numbers printed directly on the score giving special attention to the syllabication of text or in a traditional, hymn-like format (two clefs/four harmonic parts) score,”

**Complexity of music score no hindrance with numerical indicia**

It is through the use of these music sheets/scores that the participant is able to apply the numerical indicia and realize the transformation of the numbers into melodies/choral parts, of rhythms and melodies with which he/she is familiar.

“Whereby,

- (d) with presentation made without respect to fingering considerations of any kind.  
said process methodology aids in the rapid reproduction of melodies/choral parts.”.

**No complicated fingering**

While there is an assignation of numbers to keys there is no concomitant complex fingering scenario. The simplicity of the methodology, particularly for participants with no musical knowledge is apparent.

The OA states, under claims rejection 35 USC § 101, “The test for patentability is whether a process has useful, tangible and concrete result.”

**Useful, tangible, and concrete results are present**

Applicant believes the “useful, tangible and concrete” result is exemplified in the tangible reproduction of melodies/choral parts with no knowledge of conventional music and the ability

to reproduce instantaneously, thereby, precluding the usual large number of years required to acquire a workable technical knowledge of music, rhythmically and melodically. This invention is the manipulation of a system of numbers and symbols which results in the reproduction of “tangible” musical performance.

The OA states under claims rejection 35 USC § 101 that “The present invention is directed to a keyboarding process, where numbers are assigned to keys. The assignment, in and of itself, does not amount to patentable subject matter.”

#### **Patentable process is present**

In the use of the music sheets/scores, listed under claim support “(c)”, listed above, the present process/methodology does provide an assignation of numbers to notes as they naturally occur in the universal key, however, applicant believe this process is patentable because it can be used in this simplistic manner to transform music in any of 15 major keys to a simple, playable format for the student/lay musician.

The OA states under claims rejection 35 USC § 101, “the invention amounts to the manipulation of abstract ideas, where a user might visualize in the mind’s eye certain concepts while keyboarding.”

#### **Manipulation of number system**

The applicant believes that this invention is a manipulation of a system of numbers as they naturally occur in sequence whose manipulation results in the reproduction of melodies/choral parts, again without conventional musical knowledge.

The OA rejects Claim 1 under 35 USC § 103 as “being unpatentable over Bermudez. As understood, the claim is directed to a method of assigning number to keys in a keyboarding method.”

**No fingering considerations necessary**

Applicant states the following in “(d)” of the dependent claims:

“Whereby,

(d) with presentation made without respect to fingering considerations of any kind,”

This language distinguishes over Bermudez under section 102 because Bermudez requires a complicated system of finger numbering while concurrently numbering keys, to be placed around a long, straight line, said numbering appearing to suggest conceptual placement in a position as actual notes would appear on a conventional staff.

Therefore, it is submitted that patentable subject matter is clearly present. If the examiner agrees but does not feel that the present claims are adequate, applicant respectfully requests that the examiner write acceptable claims pursuant to MPEP 707.07 (j).

**CONCLUSION:** For all the reasons given above, applicant respectfully submits that these claims now comply with section 112 (claim stated in narrative form with language), the claims define over the prior art under section 102 (no complicated fingering needed, no concomitant connection needed between finger numbers and numerical indicia utilized for key assignments), and the claimed distinctions are of patentable merit under section 103 (manipulations of number system, patentable process present because of tangible and concrete result) because of the results

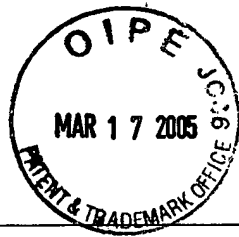
provided. Accordingly, applicant submits that this application is now in full condition for allowance which applicant respectfully solicits.

Very respectfully,

A handwritten signature in black ink, appearing to read 'Lena Faye Smith Carter', with a large, stylized flourish at the end.

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Date: March 12, 2005

Inventor's Signature: 